

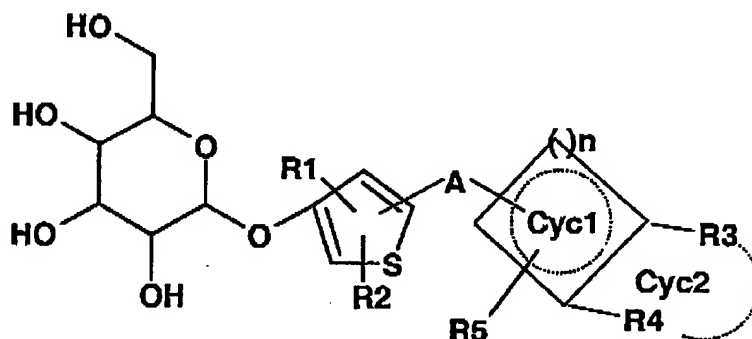
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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A compound of the formula I



wherein

R1, R2 are, independently of each other, hydrogen, F, Cl, Br, I, OH, NO₂, CN, COOH, CO(C₁-C₆)-alkyl, COO(C₁-C₆)-alkyl, CONH₂, CONH(C₁-C₆)-alkyl, CON[(C₁-C₆)-alkyl]₂, (C₁-C₆)-alkyl, (C₂-C₆)-alkenyl, (C₂-C₆)-alkynyl, (C₁-C₆)-alkoxy, HO-(C₁-C₈)-alkyl, (C₁-C₆)-alkoxy-(C₁-C₆)-alkyl, phenyl, benzyl, or (C₁-C₄)-alkylcarbonyl,

wherein one, more than one or all hydrogens in the alkyl or alkoxy radicals are optionally replaced by fluorine;

SO₂-NH₂, SO₂NH(C₁-C₆)-alkyl, SO₂N[(C₁-C₆)-alkyl]₂, S-(C₁-C₆)-alkyl, S-(CH₂)₆-phenyl, SO-(C₁-C₆)-alkyl, SO-(CH₂)₆-phenyl, SO₂-(C₁-C₆)-alkyl, or SO₂-(CH₂)₆-phenyl,

wherein o is 0-6 and wherein the phenyl radical is optionally substituted up to twice, each substituent chosen independently from F, Cl, Br, OH, CF₃, NO₂, CN, OCF₃, (C₁-C₆)-alkoxy, (C₁-C₆)-alkyl, and NH₂;

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NH₂, NH-(C₁-C₆)-alkyl, N((C₁-C₆)-alkyl)₂, NH(C₁-C₇)-acyl, phenyl, or O-(CH₂)_o-phenyl,

wherein o is 0-6 and wherein the phenyl ring is optionally substituted one to 3 times, each substituent chosen independently from F, Cl, Br, I, OH, CF₃, NO₂, CN, OCF₃, (C₁-C₆)-alkoxy, (C₁-C₆)-alkyl, NH₂, NH(C₁-C₆)-alkyl, N((C₁-C₆)-alkyl)₂, SO₂-CH₃, COOH, COO-(C₁-C₆)-alkyl, and CONH₂;

A is ~~(C₆-C₁₅)-alkanediyl, wherein one or more carbon atoms in the alkanediyl radical are optionally replaced, independently of one another, by O, (C=O), CH=CH, C≡C, S, CH(OH), CHF, CF₂, (S=O), (SO₂), N((C₁-C₆)-alkyl), N((C₁-C₆)-alkylphenyl) or NH; = CH=CH-CH₂- or (C₁-C₄)-alkanediyl, wherein one or two CH₂ groups are optionally replaced by -(C=O)-, -CH=CH-, -CH(OH)-, -NH-, -CHF-, -CF₂-, or -O-;~~

n is a number 2 or 3 ~~from 0 to 4;~~

Cycl is a ~~3 to 7 membered, saturated, partially saturated or unsaturated ring, wherein 1 carbon atom is optionally replaced by O or S; is unsaturated ring, wherein 1 carbon atom is optionally replaced by O or S;~~

R3, R4, R5 are, independently of each other, hydrogen, F, Cl, Br, I, OH, NO₂, CN, COOH, COO(C₁-C₆)-alkyl, CO(C₁-C₄)-alkyl, CONH₂, CONH(C₁-C₆)-alkyl, CON[(C₁-C₆)-alkyl]₂, (C₁-C₈)-alkyl, (C₂-C₆)-alkenyl, (C₂-C₆)-alkynyl, (C₁-C₁₂)-alkoxy, HO-(C₁-C₆)-alkyl, or (C₁-C₆)-alkoxy-(C₁-C₆)-alkyl,

wherein one, more than one or all hydrogens in the alkyl and alkoxy radicals are optionally replaced by fluorine;

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SO₂-NH₂, SO₂NH(C₁-C₆)-alkyl, SO₂N[(C₁-C₆)-alkyl]₂, S-(C₁-C₆)-alkyl, S-(CH₂)_o-phenyl, SO-(C₁-C₆)-alkyl, SO-(CH₂)_o-phenyl, SO₂-(C₁-C₆)-alkyl, or SO₂-(CH₂)_o-phenyl,

wherein o is 0-6 and wherein the phenyl radical is optionally substituted up to twice, each substituent chosen independently from F, Cl, Br, OH, CF₃, NO₂, CN, OCF₃, (C₁-C₆)-alkoxy, (C₁-C₆)-alkyl, and NH₂;

NH₂, NH-(C₁-C₆)-alkyl, N((C₁-C₆)-alkyl)₂, NH(C₁-C₇)-acyl, phenyl, (CH₂)_o-phenyl, O-(CH₂)_o-phenyl,

wherein o is 0-6 and wherein the phenyl ring is optionally substituted one to 3 times, each substituent chosen independently from F, Cl, Br, I, OH, CF₃, NO₂, CN, OCF₃, (C₁-C₈)-alkoxy, (C₁-C₆)-alkyl, NH₂, NH(C₁-C₆)-alkyl, N((C₁-C₆)-alkyl)₂, SO₂-CH₃, COOH, COO-(C₁-C₆)-alkyl, and CONH₂;

or

R3 and R4 together with the carbon atoms carrying them are a 5- to 7-membered, saturated, partially or completely unsaturated ring Cyc2,

wherein 1 or 2 carbon atoms in the ring are optionally replaced by N, O or S, and

wherein Cyc2 is optionally substituted by (C₁-C₆)-alkyl, (C₂-C₅)-alkenyl, (C₂-C₅)-alkynyl,

wherein, in each substituent of Cyc2, one CH₂ group is optionally replaced by O, or substituted by H, F, Cl, OH, CF₃, NO₂, CN, COO(C₁-C₄)-alkyl, CONH₂, CONH(C₁-C₄)-alkyl, or OCF₃, and

R5 is hydrogen;

or a pharmaceutically acceptable salt thereof.

2. (Currently Amended) A The compound as ~~claimed in~~ of claim 1, wherein A is linked to the thienyl ring in position 2.

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3. (Currently Amended) ~~A~~ The compound as ~~claimed in~~ of claim 1, wherein

R1, R2 are, independently of each other, hydrogen, F, Cl, Br, I, OH, NO₂, CN, COOH, CO(C₁-C₆)-alkyl, COO(C₁-C₆)-alkyl, CONH₂, CONH(C₁-C₆)-alkyl, CON[(C₁-C₆)-alkyl]₂, (C₁-C₈)-alkyl, (C₂-C₆)-alkenyl, (C₂-C₆)-alkynyl, (C₁-C₆)-alkoxy, HO-(C₁-C₆)-alkyl, (C₁-C₆)-alkoxy-(C₁-C₆)-alkyl, phenyl, benzyl, (C₁-C₄)-alkylcarbonyl, or SO-(C₁-C₆)-alkyl,

wherein one, more than one or all hydrogens in the alkyl or alkoxy radicals are optionally replaced by fluorine;

~~A~~ is ~~(C₈-C₁₅)-alkanediyl, wherein one or more carbon atoms in the alkanediyl radical are optionally replaced, independently of one another, by O, (C=O), CH=CH, C≡C, S, CH(OH), CHF, CF₃, (S=O), (SO₂), N((C₁-C₆)-alkyl), N((C₁-C₆)-alkylphenyl) or NH;~~

~~n~~ is a number 2 or 3;

~~Cycl~~ is a 5 to 6 membered, saturated, partially saturated or unsaturated ring, wherein 1 carbon atom is optionally replaced by O or S;

R3, R4, R5 are, independently of each other, hydrogen, F, Cl, Br, I, OH, NO₂, CN, COOH, COO(C₁-C₆)-alkyl, CO(C₁-C₄)-alkyl, CONH₂, CONH(C₁-C₆)-alkyl, CON[(C₁-C₆)-alkyl]₂, (C₁-C₈)-alkyl, (C₂-C₆)-alkenyl, (C₂-C₆)-alkynyl, (C₁-C₁₂)-alkoxy, HO-(C₁-C₆)-alkyl, (C₁-C₆)-alkoxy-(C₁-C₆)-alkyl, (C₁-C₄)-alkylphenyl, (C₁-C₄)-alkoxyphenyl, S-(C₁-C₆)-alkyl, or SO-(C₁-C₆)-alkyl,

wherein one, more than one or all hydrogens in the alkyl or alkoxy radicals are optionally replaced by fluorine;

or

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- R3 and R4 together with the carbon atoms carrying them are a 5- to 7-membered, saturated, partially or completely unsaturated ring Cyc2,
 wherein 1 or 2 carbon atoms in the ring are optionally replaced by N, O or S, and
 wherein Cyc2 is optionally substituted by (C₁-C₆)-alkyl, (C₂-C₅)-alkenyl, or (C₂-C₅)-alkynyl,
 wherein in each substituent of Cyc2, one CH₂ group is optionally replaced by O, or substituted by H, F, Cl, OH, CF₃, NO₂, CN, COO(C₁-C₄)-alkyl, CONH₂, CONH(C₁-C₄)-alkyl, or OCF₃, and
- R5 is hydrogen.

4. (Currently Amended) ~~A~~ The compound ~~as claimed in~~ of claim 1, wherein

- R1, R2 are, independently of each other, hydrogen, (C₁-C₆)-alkyl, (C₁-C₄)-alkoxy, HO-(C₁-C₄)-alkyl, (C₁-C₄)-alkoxy-(C₁-C₄)-alkyl, F, Cl, CF₃, OCF₃, OCH₂CF₃, (C₁-C₄)-alkyl-CF₂-, phenyl, benzyl, (C₁-C₄)-alkylcarbonyl, (C₂-C₄)-alkenyl, (C₂-C₄)-alkynyl, or COO(C₁-C₄)-alkyl;

~~A — is CH=CH-CH₂- or (C₁-C₄)-alkanediyl,
 wherein one or two CH₂ groups are optionally replaced by (C=O)-,
 -CH=CH-, CH(OH)-, NH-, CHF-, CF₂-, or O-;~~

~~n — is a number 2 or 3;~~

~~Cyc1 — is unsaturated ring, wherein 1 carbon atom is optionally replaced by O or S;~~

- R3, R4, R5 are, independently of each other, hydrogen, F, Cl, Br, I, NO₂, OH, CN, (C₁-C₆)-alkyl, (C₁-C₈)-alkoxy, OCF₃, OCH₂CF₃, S-(C₁-C₄)-alkyl, COOH,

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HO-(C₁-C₄)-alkyl, (C₁-C₄)-alkoxy-(C₁-C₄)-alkyl, (C₁-C₂)-alkylphenyl, or
(C₁-C₂)-alkoxyphenyl, or

R3 and R4 together are -CH=CH-O-, -CH=CH-S-, -O-(CH₂)_p-O-, -O-CF₂-O-, or -
CH=CH-CH=CH-, wherein p = 1 or 2, and

R5 is hydrogen.

5. (Currently Amended) ~~A~~ The compound as ~~claimed in~~ of claim 1, wherein R2 is
hydrogen.

6. (Currently Amended) ~~A~~ The compound as ~~claimed in~~ of claim 1, wherein

R1 is hydrogen, CF₃, (C₁-C₄)-alkyl, or phenyl,

R2 is hydrogen,

A is -CH₂-, -C₂H₄-, -C₃H₆-, -CH(OH)-, -(C=O)-, -CH=CH-, -CH=CH-CH₂-,
-CO-CH₂-CH₂- or -CO-NH-CH₂-;

~~n~~ is a number 2 or 3;

Cyc1 is an unsaturated ring, wherein 1 carbon atom is optionally replaced by S;

R3, R4, and R5 are, independently of each other, hydrogen, F, Cl, I, NO₂, OH, CN,
(C₁-C₆)-alkyl, (C₁-C₈)-alkoxy, O-CH₂-phenyl, OCF₃, S-CH₃, or COOH or

R3 and R4 together are -CH=CH-O-, -O-(CH₂)_p-O-, -O-CF₂-O-, -CH=CH-CH=CH-,
wherein p = 1 or 2, and

R5 is hydrogen.

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7. (Currently Amended) ~~A The compound as claimed in~~ of claim 1, wherein A is $-\text{CH}_2-$ or $-\text{CH}_2-\text{CH}_2-$.
8. (Currently Amended) ~~A The compound as claimed in~~ of claim 1, wherein Cyc1 is phenyl.
9. (Currently Amended) ~~A The compound as claimed in~~ of claim 1, wherein Cyc1 is thienyl.
10. (Currently Amended) ~~A The compound as claimed in~~ of claim 1, wherein Cyc1 is monosubstituted.
11. (Currently Amended) A medicament comprising at least one compound as claimed in claim 1 and a pharmaceutically acceptable carrier.
12. (Original) A medicament comprising at least one compound as claimed in claim 1 and at least one more blood glucose-lowering active ingredient.
13. (Original) A method for treating type 1 or type 2 diabetes, comprising administering to a patient in need thereof an effective amount of at least one compound as claimed in claim 1.
14. (Original) A method for lowering blood glucose, comprising administering to a patient in need thereof an effective amount of at least one compound as claimed in claim 1.
15. (Original) A method for treating type 1 or type 2 diabetes, comprising administering to a patient in need thereof an effective amount of at least one compound as claimed in claim 1 and at least one other active ingredient, wherein the at least one other active ingredient is effective for lowering blood glucose.

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16. (Original) A method for lowering blood glucose, comprising administering to a patient in need thereof an effective amount of at least one compound as claimed in claim 1 and at least one other active ingredient, wherein the at least one other active ingredient is effective for lowering blood glucose.
17. (Original) A process for producing a medicament comprising at least one compound as claimed in claim 1, comprising:
mixing the at least one compound as claimed in claim 1 with a pharmaceutically suitable carrier, and
converting this mixture into a form suitable for administration.